

Amendments to the Claims:

Please amend claims 1 – 4, 6, 8, 9, 11 – 17, as follows:

Claim 1 (currently amended): A method for the manufacture of a cam shaft from a tube, ~~which can be deformed by the action of axial forces and a medium under an internal pressure, characterized in that~~ the cam shaft having bearer rings attached thereto, the method comprising the following steps:

producing bearer rings, produced in a separate method corresponding to the in correspondence with an outline of the cams on said cam shaft, the bearer rings having the necessary hardness, strength and wear resistance, in a separate method;

placing the tube and the bearer rings and are placed in a high internal pressure forming tool together with the tube to be formed and subjected to the action of axial forces and;

applying axial forces to the ends of the tube; and

applying a medium under an a high internal pressure to the tube, whereby the tube is expanded in defined region to form hollow cams and whereby the bearer rings are attached to the tube of the sited of the cams in a frictional and interlocking manner by expansion of the tube in a frictional and interlocking manner.

Claim 2 (currently amended): The method as set forth in claim 1, characterized in that in a ~~first method~~ step prior to such high internal pressure forming, regions that lie at the ends of the tube outside the regions in which the cams are seated, are ~~so kneaded and/or upset that same are increased in thickness and/or are stretched and thus~~ for forming different functional elements ~~are formed~~.

Claim 3 (currently amended): The method as set forth in claim 1, characterized in that between the cam shaft ends in ~~the first method~~ a step prior to internal high pressure forming bearing faces and the eventual region where the cams are to be seated, are produced by round kneading and by reducing the diameter in this part to the desired size.

Claim 4 (currently amended): The method as set forth in claim 1 or in claim 2, characterized in that between the cams bearing faces are produced by internal high pressure forming by expanding the tube.

Claim 5 (previously amended): The method as set forth in claim 1, characterized in that the bearer rings are hardened in a known manner prior to being placed in the internal high pressure forming tool.

B1
cont
Claim 6 (currently amended amended): The method as set forth in claim 1, characterized in that a gear wheel or sprocket wheel produced in a separate method is placed in the internal high pressure forming tool and is ~~connected~~ secured by the internal high pressure forming step frictionally and/or in an interlocking manner.

Claim 7 (previously amended): The method as set forth in claim 1, characterized in that after the production of the thickened and/or tapered ends of the cam shaft internal gear teeth and/or a thread is produced by round kneading in an additional method step integrated in an additional method step as part of this method step.

Claim 8 (currently amended): A cam shaft ~~produced as set forth in claim 1,~~ characterized in that the cam shaft is ~~so~~ produced from a tube (1) by ~~an~~ the internal high pressure forming method set forth in claim 1 such that the shaft ~~complies peripherally to have all~~ comprises hollow cams (2) in form and in position in a single piece, and that on the formed cams (2) a bearer ring (3), shaped to correspond to the cam periphery and made of a hard, wear-resistant material is secured frictionally and in an interlocking manner, ~~on which in a known manner bearing elements and/or drive elements and/or control elements (5) are arranged.~~

Claim 9 (currently amended): A cam shaft ~~produced as set forth in claim 8,~~ characterized in that the bearer rings (3) ~~possess the same~~ have an even wall thickness.

Claim 10 (original): A cam shaft produced as set forth in claim 8, characterized in that the thickness of the bearer rings (3) is variable, the thickness being greatest near the cam tip.

Claim 11 (currently amended): A cam shaft ~~produced~~ as set forth in claim 8, characterized in that the bearer ring rings (3) ~~is produced~~ consist of sintered metal, or plastic or ceramic material.

B1
cont
Claim 12 (currently amended): A cam shaft ~~produced~~ as set forth in claim 8, characterized in that the tube (3) ~~is produced~~ consists of aluminum, magnesium or titanium or its alloys.

Claim 13 (currently amended): A cam shaft ~~produced~~ as set forth in claim 8, characterized in that the ends of the tube (3) ~~are formed by kneading so that by expansion or tapering the original diameter (D_i and d_a) of the tube (1) possesses~~ comprise bearing faces, drive and/or control elements and internal and/or external screw threads.

Claim 14 (currently amended): A cam shaft ~~produced~~ as set forth in claim 8, characterized ~~in that the~~ by additional drive and control elements, preferably sprocket or gear wheels, ~~are produced~~ secured by an the internal high pressure forming method.

Claim 15 (currently amended): A cam shaft ~~produced~~ as set forth in claim 14, characterized in that at least one radially extending groove (4) is produced in the bearer ring (3) and the drive and control elements.

Claim 16 (currently amended): A cam shaft ~~produced~~ as set forth in claim 14, characterized in that the side, facing the tube (1) of the bearer ring (3) has chamfers on one or both sides on the side facing the tube

Claim 17 (currently amended): A cam shaft ~~produced~~ as set forth in claim 8, characterized in that the bearer ring rings (3) ~~is~~ are hardened prior to application on the formed cams.